Interview with Rear Admiral Kenneth William Deutsch Chief of Naval Operations, Net-Centric Warfare Division (N71)

CNO N71 provides Navy Space and Electronic Warfare Leadership, Vision, Policy and Resources in support of Naval, Joint and Combined Operating Forces. As the resource sponsor for Trident Warrior 2005 (TW05), the Navy's annual FORCEnet Sea Trial experiment, CNO N71 rigorously examines the independent analysis of the TW experiments to make strategic resource allocation decisions for building future warfighting capabilities. CHIPS asked Rear Adm. Deutsch to talk about some of the areas of TW that are under particular scrutiny.

Rear Adm. Deutsch: First let me thank you for the opportunity to discuss the great things that we are doing in FORCEnet with respect to experimentation. In my role as a resource sponsor, experimentation helps form the budget process by providing an assessment of how both material and non-material solutions impact warfighting effectiveness. In the current fiscally constrained environment, the Navy needs this type of information before making investment decisions.

My focus is on the systems and processes that empower commanders to make better decisions faster and to see the effects of those decisions more rapidly. For example, looking at the improved battlespace awareness that Global Hawk can provide, the fusion of information that Network Centric Collaborative Targeting (NCCT) facilitates, how to better integrate our allies and the increased reliability, flexibility and throughput that Automated Digital Network System (ADNS) Increment IIA delivers. More importantly, I am interested in putting in place the relevant processes that optimize these advances in technology.

CHIPS: Can you talk about some of the things that you would like to see improved in the fleet regarding joint operations?

Rear Adm. Deutsch: The CNO's Guidance for 2006 emphasizes 'Jointness.' There is an increasing requirement for interoperability and cooperation among the services, interagency, international partners and non-governmental organizations. This will require overcoming the current impediments to seamless joint operations like the lack of an accurate Common Operational Picture (COP) that provides a level of situational awareness for the warfighter across all U.S. Navy joint partners, including the need to improve the capability to select, receive and display Blue Force Tracking data.

We need to provide the warfighter with a capability to identify and track friendly forces in assigned areas of operations. We also need to improve the ability to collaborate in a timely manner across all elements of the 'Joint' force. This drives the need to modernize both security policies, which govern information sharing, and delivery of supporting systems.

CHIPS: What are some of the ways that N71 works with the AUSCANNZUKUS (Australia, Canada, New Zealand, United Kingdom and United States) Naval C4 organization?

Rear Adm. Deutsch: The AUSCANNZUKUS Supervisory Board is made up of flag officers drawn from the national policy or operational requirement authorities from each of the AUSCANNZUKUS nations. This Board meets annually to endorse policy and resource allocation proposed by the C4 Committee, and provides top-level guidance to the organization.

As N71, I chair this Supervisory Board, which provides an effective forum for sharing knowledge between allied nations, allowing risks to interoperability to be quickly identified and new technologies that can ameliorate these risks to be taken forward. AUSCANNZUKUS has been closely involved in the development of coalition Internet Protocol (IP) networking over the past few years, taking the lead role in the development of the Allied Maritime Tactical Wide Area Networking guidance publication, Allied Communications Publication 200 (ACP200), experimentation and several standardization documents.

CHIPS: What are some of the technologies that our partners will be evaluating? How did you work together during TW05?

Rear Adm. Deutsch: The AUSCANNZUKUS Experimentation Working Group (EWG) designed and executed 18 coalition initiatives focusing on three thematic areas that are considered critical for conducting networked information sharing with our Coalition partners:

• Extending the information sharing network to non-satellite fitted units through Line of Sight (LOS) networking technologies;

• Ensuring applications that are critical to the warfighter operate effectively across the LOS networks; and

• Validating policies and procedures for operating in an Allied Maritime Tactical Wide Area Network (AMTWAN) through ACP200.

Using a combination of satellite and LOS technologies, we formed a robust tactical network that connected nine coalition warships, literally, across the globe. From HMNZS Te Mana, off the coast of New Zealand, through HMS Iron Duke alongside Portsmouth, England and into virtual platforms in Sydney, Australia and Auckland, New Zealand, all connected seamlessly to Canadian and U.S. ships operating off Norfolk, Va.

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– Rear Adm. Kenneth William Deutsch

In addition, specific areas evaluated were Subnet Relay (SNR), HF IP, JPEG 2000 Interactive Protocol (JPIP) imagery transfer, Sigaba Interop Express (encrypted e-mail) and Peribits WAN Accelerator. We also validated doctrine within the guide for the Allied Maritime Tactical Wide Area Network contained in Allied Communications Publication 200.

CHIPS: Given the emphasis on coalition operations, do you think that interoperability has improved when the U.S. Navy works with coalition navies in global operations?

Rear Adm. Deutsch: Before I answer that, I must point out that, if history tells us anything, it is that successful coalition interoperability will be critical to the success of future Navy missions. As N71, I am committed to continuing to build on our existing ability to work with all our potential partners. However, we should recognize that not all our potential coalition partners will have the same C4 technical capability as the U.S. Navy nor are they all as politically willing to work closely with the U.S. Navy.

Our future FORCEnet architecture must recognize this reality and be flexible enough to accommodate partners at the level we find them. This in effect means a range of C4 solutions to allow partners to interoperate at the appropriate level. Some nations will seek integration with the U.S. Navy, others will interoperate at a lesser capability.

In answer to your question, I believe that maritime C4 interoperability between the U.S. Navy and its partners is probably at its highest level ever. This is a result of many years of evolutionary developments including traditional military messaging and deployment of improved interoperable tactical data links, combat identification and secure voice systems.

I would particularly note the growth at sea of interoperable IP-based networks such as the Combined Enterprise Regional Information Exchange System (CENTRIXS) over the last five years.

Through bilateral and multilateral efforts, such as Coalition Warrior Interoperability Demonstration (CWID) and Trident Warrior exercises or real world operations, we continue to investigate and develop new ways of working with our partners.

CHIPS: How do the coalition navies rate our efforts to improve interoperable communications?

Rear Adm. Deutsch: You will have to ask our allies to report on their assessment of our efforts. We have, however, put money into this area recently in response to lessons from Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF), and hopefully our efforts are recognized! From discussions I have had with allied flag officers, we believe that key areas to improve in the medium term include:

Some of the AUSCANNZUKUS members who participated in TW05 from left – Canadian Navy Lt. Cmdr. Rob Sibbald, C4 Interoperability Project Officer AUSCANNZUKUS Naval C4; Canadian Navy Lt. Cmdr. Ken Dufour, Directorate Maritime Requirements; Australian Royal Navy Warrant Officer Andrew Kirkpatrick, Officer in Charge Defense Communications; Royal Navy Lt. Cmdr. Steve Beaumont, Fleet CIS-N6 Interoperability; and Royal New Zealand Navy Lt. Cmdr. Murray Tuffin, Director of Naval C4I at a TW05 planning session October 2005 in Norfolk, Va.

- Building a coherent combined and joint common operational picture.
- Improving allied blue force situational awareness.
- Achieving data standardization between nations.
- Strengthening the allied IP network by establishing multiple paths and removing single points of failure.
- Growing our overall network capacity.
- Migrating over the next five years to new military messaging systems.
- Improving information flow between national and coalition domains by developing better cross-domain solutions.

CHIPS: What is your overall assessment of Trident Warrior 05?

Rear Adm. Deutsch: Pending completion of the data collection and analysis and subsequent formal Military Utility Assessment (MUA), at first look, TW05 appears to have been a very successful experiment, demonstrating the ability to form, connect and sustain a five-nation Coalition Task Group to successfully support a tactical global war on terror (GWOT) scenario.

There are major benefits to putting technologies and processes into an at sea experiment such as the opportunity for interaction between the systems developers, technical experts and shipboard operators. Most significantly, Trident Warrior 05 provides essential insights into the systems and associated techniques, tactics and procedures that are fundamental to delivering FORCEnet to our operational forces. CHIPS